AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (currently amended) A method of producing a carbon nanohorn assembly including:

irradiating a surface of a graphite target with pulse light to vaporize carbon vapor from said graphite target and recovering the carbon vapor to obtain a carbon nanohorn,

wherein an irradiation position of said pulse light is moved at substantially constant speed when the surface of said graphite target is irradiated with said pulse light,

a power density of said pulse light is set in a range of 5 kW/cm^2 or more and 25 kW/cm^2 or less, [[and]]

a pulse width of said pulse light is set in a range of 0.5 seconds or more and 1.25 seconds or less, and

a condition of irradiation with said pulse light satisfies expression (1):

$0.5 \leq (\text{pulse width})/(\text{pulse width} + \text{pause width}) \leq 0.8$ (1).

2. (currently amended) The method of producing a carbon nanohorn assembly as claimed in claim 1,

wherein [[a]] the pause width of said pulse light is set not less than 0.25 seconds.

3. (canceled)

4. (previously presented) The method of producing a carbon nanohorn assembly as claimed in claim 1,

wherein the irradiation position of said pulse light is moved at a speed ranging from 0.01 mm/sec or more and 55 mm/sec or less.

5. (previously presented) The method of producing a carbon nanohorn assembly as claimed in claim 1,

wherein a side face of a cylindrical graphite target is irradiated with said pulse light while said graphite target is rotated about a central axis.

6. (previously presented) The method of producing a carbon nanohorn assembly as claimed in claim 1,

wherein said irradiation position is moved while an irradiation angle of said pulse light is kept substantially constant.

7. (previously presented) The method of producing a carbon nanohorn assembly as claimed in claim 1,

wherein said irradiation position is moved such that said irradiation positions of said pulse light do not overlap one another in the surface of said graphite target.

8. (new) The method of producing a carbon nanohorn assembly as claimed in claim 1,

wherein the graphite target is a graphite rod, and an irradiation angle of the pulse light is from 30 degrees to 60 degrees.

9. (new) The method of producing a carbon nanohorn assembly as claimed in claim 1,

wherein the graphite target is a graphite rod, and an irradiation angle of the pulse light is 45 ± 5 degrees.

10. (new) The method of producing a carbon nanohorn assembly as claimed in claim 1,

wherein the irradiating is performed in an inert gas atmosphere containing Ar or He.

11. (new) The method of producing a carbon nanohorn assembly as claimed in claim 10,

wherein the inert gas atmosphere has a pressure range of 10^3 Pa to 10^5 Pa.

12. (new) The method of producing a carbon nanohorn assembly as claimed in claim 10,

wherein prior to providing the inert gas atmosphere, a producing chamber has been evacuated to 10^{-2} Pa.

13. (new) The method of producing a carbon nanohorn assembly as claimed in claim 1,

wherein a pulse width of said pulse light is set in a range of 0.75 seconds or more to 1 second or less.

14. (new) The method of producing a carbon nanohorn assembly as claimed in claim 1,

wherein a spot diameter of the pulse light is from 0.5 mm to 5 mm.

15. (new) The method of producing a carbon nanohorn assembly as claimed in claim 1,

wherein the graphite target is a graphite rod, and the graphite rod has a liner speed of 0.01 mm/sec to 55 mm/sec.

16. (new) The method of producing a carbon nanohorn assembly as claimed in claim 1,

wherein the graphite target is a graphite rod, and the graphite rod has a liner speed of 10 mm/sec to 32 mm/sec.

17. (new) The method of producing a carbon nanohorn assembly as claimed in claim 1,

wherein the graphite target is a graphite rod, and the constant speed is 0.01 rpm to 10 rpm.

18. (new) The method of producing a carbon nanohorn assembly as claimed in claim 1,

wherein the graphite target is a graphite rod, and the constant speed is 2 rpm to 6 rpm.

19. (new) A method of producing a carbon nanohorn assembly including:

irradiating a surface of a graphite rod with pulse light to vaporize carbon vapor from said graphite rod and recovering the carbon vapor to obtain a carbon nanohorn,

wherein an irradiation position of said pulse light is moved at substantially constant speed when the surface of said graphite rod is irradiated with said pulse light,

a power density of said pulse light is set in a range of 5 kW/cm^2 or more and 25 kW/cm^2 or less,

a pulse width of said pulse light is set in a range of 0.75 seconds or more and 1.25 seconds or less, and

an irradiation angle of the pulse light is from 30 degrees to 60 degrees.

20. (new) The method of producing a carbon nanohorn assembly as claimed in claim 19,

wherein a condition of irradiation with said pulse light satisfies expression (1):

$0.5 \leq$ (pulse width)/(pulse width + pause width) ≤ 0.8 (1).

21. (new) The method of producing a carbon nanohorn assembly as claimed in claim 19,

wherein the irradiation angle of the pulse light is 45 $\pm$ 5 degrees.